

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method ~~Method~~ for estimation and control of ~~[[the]]~~ concentrations of pollutant gases at ~~[[the]]~~ a discharge of a gas turbine, the method comprising the following steps:

~~[[•]]~~ ~~receipt of~~ receiving a plurality of signals corresponding to data relating to ~~[[the]]~~ an operating state of the gas turbine, wherein the data includes a rotation speed of a shaft, a temperature of a discharge at the gas turbine, and a temperature of the environment;

~~[[•]]~~ ~~processing of this~~ in a processor the data; and

~~[[•]]~~ ~~evaluation of the~~ evaluating emissions into the atmosphere from ~~[[this]]~~ the gas turbine on the basis of based on the ~~[[said]]~~ processed data ~~processed without using in-line analyzers.~~

2. (Currently Amended) The method ~~Method~~ according to claim 1, additionally comprising:

~~the step of storage of~~ storing the data processed in order to create a historic file of the emissions from the gas turbine.

3. (Currently Amended) The method ~~Method~~ according to claim 1, wherein

the said step of processing this data comprises:

~~the step of interfacing this data with refinement parameters~~ using known parameters and constants of the gas turbine to evaluate the emissions.

4. (Currently Amended) A system ~~System~~ for estimation and control of ~~[[the]]~~ concentrations of pollutant gases at ~~[[the]]~~ a discharge of a gas turbine, ~~characterised in that it~~ the system comprising comprises:

~~[[•]]~~ an acquisition unit ~~((3) for the~~ configured to receive data relating to ~~[[the]]~~ an operating state of the gas turbine, the ~~[[said]]~~ data being detected by a control panel ~~[[(2)]]~~ of the gas turbine, wherein the data includes a rotation speed of a shaft, a temperature of a discharge at the gas turbine, and a temperature of the environment; and

~~[[•]]~~ a local processing unit ~~[[(4)]]~~ which processes connected to the acquisition unit and configured to process the ~~[[said]]~~ data in association with the ~~[[said]]~~ acquisition unit and ~~makes to make~~ the data available for consultation at a remote location, in order to evaluate ~~[[the]]~~ emissions of ~~[[by]]~~ the ~~[[said]]~~ gas turbine into the atmosphere without using in-line analyzers, ~~on the basis of the said~~ based on the processed data processed.

5. (Currently Amended) The system ~~System~~ according to claim 4, wherein the ~~[[said]]~~ local processing unit comprises:

a data base for storage of the ~~data~~ processed data.

6. (Currently Amended) The system ~~System~~ according to claim 4, ~~[[also]]~~
further comprising:
a remote processing unit ~~[[5]]~~ which is connected to the ~~[[said]]~~ local processing
unit by ~~means of~~ a telecommunications line.

7. (Currently Amended) The system ~~System~~ according to claim 6, wherein
the ~~said~~ telecommunications line is an Internet line.

8. (Currently Amended) The system ~~System~~ according to claim 7, wherein
the ~~said~~ remote unit ~~consults this~~ is configured to access the data by means of via
an Internet based consultation program ~~programme~~.

9. (Currently Amended) The system ~~System~~ according to claim 4, wherein
the ~~said~~ local processing unit comprises:
a calculator which carries out the processing of ~~[[this]]~~ the data.

10. (Currently Amended) The system ~~System~~ according to claim 9, wherein
the ~~said~~ calculator carries out statistical calculation of the data stored in the historic
data base for operation of the gas turbine.

11. (New) The method of claim 1, further comprising:

determining emissions of oxygen, nitric oxides, and carbon monoxide of the gas turbine.

12. (New) The method of claim 1, wherein the data further includes a temperature at a discharge from a compressor of the gas turbine, a pressure of delivery to the compressor, a relative humidity of the environment, a molecular weight of a combustible gas, a compressibility of the combustible gas, a delivery mass of fuel, and a delivery of the combustion air.

13. (New) The system of claim 4, wherein the local processing unit is configured to determine emissions of oxygen, nitric oxides, and carbon monoxide of the gas turbine.

14. (New) The system of claim 4, wherein the data further includes a temperature at a discharge from a compressor of the gas turbine, a pressure of delivery to the compressor, a relative humidity of the environment, a molecular weight of a combustible gas, a compressibility of the combustible gas, a delivery mass of fuel, and a delivery of the combustion air.